

II. REMARKS

Claims 1-12, 14-19 and 21-24 were previously pending. Claims 1, 3-6, 8, and 21 are presently amended. Claim 2 is cancelled. Reconsideration of presently pending claims 1, 3-12, 14-19, and 21-24 is respectfully requested in light of the above amendments and the following remarks.

Claim 3 Informality Objection

Claim 3 has been amended to underline the new amended matter as indicated by the Examiner.

Informality Objections in Applicant's Remarks

Applicant's Remarks objected to for typographical errors as indicated by the Examiner have been noted and will be corrected as necessary in the present response.

Claim Rejections – 35 USC § 101

Claims 1-12, 14-19 and 23-24 were rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter. Appropriate correction has been made to independent claims 1 and 6, and the claims that depend therefrom. The Federal Circuit recently affirmed the Supreme Court precedent that "A claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus." *In re Bernard L. Bilski*, United States Court of Appeals for the Federal Circuit 2007-1130 (Serial No. 08/833,892) at pg. 10. The Court stated "we believe that our reliance on the Supreme Court's machine-or-transformation test as the applicable test for § 101 analyses of process claims is sound." *Id.* at pg. 14. Therefore, the Applicants submit that claims as amended, including further defining the computer system, meet this "machine-or-transformation" test for at least this reason. The Applicants respectfully request the Examiner withdraw of the rejection.

Claim Rejections – 35 USC § 102

Claims 21 and 22 were rejected under 35 USC 102(e) as being anticipated by Yang et al. (U.S. Publication No. 2003/0233290, hereinafter referred to as Yang).

Claim 21 requires:

"instructions for a plurality of event elements for tracking the product through the plurality of entities of the virtual fab, wherein a plurality of event elements are provided for each of the plurality of entities of the virtual fab...[and]
instructions for controlling the product quality, wherein the product quality may be controlled by at least two of the plurality of entities"

At least both of the elements of claim 21 quoted above are not disclosed by Yang. The Applicants kindly request the Examiner withdraw the rejection. Each element and the contrasting disclosure by Yang is described in turn.

In a previous response, the Applicants argued that Yang did not disclose a plurality of event elements for EACH of the plurality of entities of the virtual fab as required by claim 21. In response, the Examiner states “(1) Examiner respectfully disagrees. See rejection above.” Office action dated 10/28 at pg. 21. With respect to the asserted disclosure of the element, the Examiner argues Yang discloses in “[0080, base lot field is a derived number indicator used for tracking the lot for a buyer through all the suppliers]; see also, ¶ [0136, lot tracking report])” Paragraph [0080] of Yang is reproduced below for ease of reference.

[0080] 1) Base Lot. A derived number indicator used for tracking the lot genealogy for a buyer through all suppliers.

As is clear from inspection of [0080], it provides no indication of event elements. Much less does it provide a plurality of event elements with a single entity. In contrast it states, that tracking the lot is done through ALL suppliers. [0080] is describing a field of Table 1, see [0078]–[0079]. There is no indication in Table 1 of event elements within a single entity. In contrast the Table provides die and wafer quantities, lot numbers, shipping dates, shipping costs, etc. In other words, Yang provides tracking a lot as it moves from supplier to supplier and the cited portions of Yang are not concerned with events within a supplier.

The Examiner’s citation to [0136] and a lot tracking report is likewise off-point. Paragraph [0136] introduces Fig. 14 as one example of a lot tracking report. Fig. 14 is reproduced below for ease of reference.

FIG. 14

Lot Tracking Report

Wednesday, Sept 05, 2001 6:18:49 PM (local time)

Please input a lot number (priority search criteria):

OR select by Device

9051BWBA

Base Lot Number:

N1805

Get Report

Base Lot	Lot No	Part No	Routing	Unit	Sup	Received Date	Received Qty	Start Date	Completed Date	Completed Qty	Ship Date	Ship Qty	Order No	Yield (%)	Cycle Time
N1805	N1805		Fab	wafers	Juke			1/20/2001	8/20/2001	25	2/28/2001	25	200363		81
N1805	N1805		Wafer Sort	Die	arka	1/41/2001	67,250	3/8/2001	2/10/2001	64,514	3/6/2001	64,514	005079	95.4	3
N1805	N1805	IS41C16255 J-K	Assembly	Die	plgtr	1/34/2001	64,514	4/26/2001	4/19/2001	64,352	4/21/2001	64,352	201258	99.8	101
N1805	N1805.1	IS41C16255 32K	Final Test	Die	plgtr	4/21/2001	23,162	4/21/2001	5/11/2001	23,350	4/11/2001	23,350	051011	98.3	22
N1805	N1805.2	IS41C16255 32K	Final Test	Die	plgtr	4/14/2001	22,879	4/14/2001	4/22/2001	20,871	4/22/2001	20,871	151951	91.2	8
N1805	N1805.3	IS41C16255 32K	Final Test	Die	plgtr	4/23/2001	21,706	4/23/2001					151655		

As is clear from a review of Fig. 14, a plurality of event elements within a single entity are not provided for. The lot tracking report tracks a given lot statistics of received date, start date, completed date, ship date, ship quantity, order number, yield. But there is no indication of event elements within a supplier. As such, the Applicants respectfully request the rejection of claim 21 and the claims that depend therefrom be withdrawn.

It is noted that again the Examiner states that “Yang does not explicit disclose assigning event elements.” Office action, pg. 21. However, the Examiner continues to assert that Luce provides for such. The Applicants remind the Examiner that claim 21 has been rejected under § 102 as anticipated by Yang.

With reference to the element directed to controlling product quality, the Examiner argues the same is provided by Yang specifically: “[0068-0069 supply chain management system containing a multi-lot processor with communication means via internet]; see also, ¶ [0059 supply chain parameter such as quantity, quality, and delivery time]; see also, ¶ [0092-0093 data integrity unit includes a data checking unit and data cleansing to improve quality of data]);” In contrast, Yang’s [0068] describes Fig. 7, which is a purchase order set providing that “each of the suppliers receives ‘current’ and accurate information from upstream suppliers through use of communications over the Internet.” Yang’s [0069] describes Fig. 8 which depicts a supply chain management system with “an environment of multiples buyers...and multiple suppliers...in a supply chain.” [0069]. Indication of a supply system including buyers and sellers, or even receiving “information” (see [0068]) between the multiple suppliers is different from

controlling product quality. Furthermore, [0059] cited by the Examiner, with out more, clearly does not enable “instructions for controlling the product quality, wherein the product quality may be controlled by at least two of the plurality of entities.” The paragraph states “Typically, in the semiconductor manufacturing industry, the output at any stage is a variable, for example, varying as to supply chain parameters such as quantity, quality and deliver time.” First an “output” of quality provides no indication of control of product quality, much less by a plurality of entities. Furthermore, the cited portion of Yang provides only that downstream orders need to be conditioned upon the results of upstream suppliers. [0059]. Applicants find no further discussion regarding the quality information. Finally, the Examiner sites to [0092]-[0093] as providing “data integrity unit includes a data checking unit and data cleansing to improve quality of data.” The quality of **data** is clearly distinct from and different than a **product** quality. Therefore, claim 21 and the claims that depend therefrom should be allowable for at least this reason.

Claim Rejections – 35 USC § 103

Claims 1-5, 6, 7, 11, 12, 14-19 and 23-24 were rejected under 35 USC 103(a) as being unpatentable over Yang in view of Arackaparambil et al. (U.S. Patent Publication No. 2002/0156548, hereinafter referred to as Arackaparambil). Claims 8, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of Luce et al. U.S. 7,356,558 (hereinafter referred to as Luce). Applicant traverses this rejection on the grounds that these references are defective in establishing a *prima facie* case of obviousness.

In *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007), the Court stated that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *Id.* at 1741 (emphasis added).

As the PTO recognizes in MPEP §2142:

... The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness...

In the present application, a *prima facie* case of obviousness does not exist for the claims for the reasons set forth below.

The Examiner has not shown that all words in the claim have been considered

MPEP 2143.03 states that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” Quoting *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). However, in the present matter, the Examiner has not shown that all words in the claim have been considered.

The Examiner states that “Yang does not explicitly disclose assigning a predetermined event element to the semiconductor-related product at the secondary provided, wherein the predetermined event element includes a product-specific process parameter.” Office action, pg. 9. Instead the Examiner asserts that such is provided by Arackaparambil. Even assuming, *arguendo*, that Arackaparambil provides for assigning predetermined event elements there is no indication that a first computer system associated with a primary provider performs this assignment for events at a secondary provider. Arackaparambil describes a “wafer fabrication or wafer fab” [0004]. However, the Applicants find no indication of multiple providers. Yang, as described above with reference to claim 21, describes a plurality suppliers, but does not indicate any systems or processes occurring within those suppliers. Therefore, for at least this reason, claim 1 and the claims that depend therefrom are allowable.

Claim 6 also includes an element directed to “assigning event elements to the product through the virtual fab, wherein the even elements include a plurality of process steps performed by the secondary provider, wherein the event elements are stored in a memory unit.” For at least the same reasons as described above with reference to claim 1, claim 6 and the claims that depend therefrom are allowable.

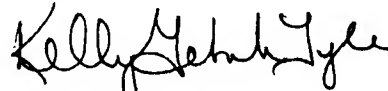
Dependent Claims

Dependent claims 3-5, 7-12, 14-19, and 22-24 dependent from and further limit claims 1, 6, and 21 and are allowable for at least that reason.

Conclusion

An early formal notice of allowance of claims 1, 3-12, 14-19, and 21-24 is requested. The Examiner is invited to telephone the undersigned if further assistance is necessary. Deposit account number 08-1394 can be used for any over payments or under payments.

Respectfully submitted,

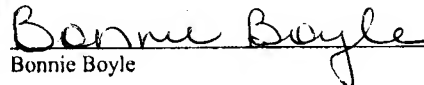


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